Leadership and Management

- ▶ Line Management is accountable for the safety of their workers. Their supervisors will incorporate measurable performance criteria in line manager's performance plans and evaluate and document results in their performance evaluations.
 - Objective Quality Evidence (OQE) –
 Performance Evaluations Related to Safety
- ► Center Directors and Associate Administrator for Institutions and Management
 - Designate the Safety Assurance Functional Director
 - OQE Official Documentation Assigning the Safety Assurance Functional Director
 - Shall ensure that policies, plans, procedures, and standards that define the parameters of the safety program are established, documented, maintained, communicated, and implemented to provide for the appropriate or adequate protection and prevention of loss and damage to personnel, property, material, equipment, and facilities of NASA, other agencies, and the public.
 - OQE Center Safety Policies, Observation and Interviews with Center personnel, Training Records
 - Include and ensure appropriate safety and mission assurance Risk-Based Acquisition Management (R-BAM) requirements are included in procurement, design, development, fabrication, test, or operations of systems, equipment, and facilities that will serve as a basis for awarding any fee on contracts.
 - OQE Contracts
 - Shall ensure that an effective system safety and mission assurance program based on a continuous risk assessment process is established to include development of safety requirements early in the planning phase, review of the implementation of those requirements during the acquisition, development, and operational phases, and the use of R-BAM and tracking system to maintain status of the hazards during the process.
 - OQE Program Implementation
 - Shall ensure that qualified personnel and appropriate training are provided to support the safe performance of potentially hazardous or critical technical operations and to ensure a qualified safety workforce is available to support the safety assurance function.
 - OQE Training and Certification Requirements/Records

YOUR PREPAREDNESS FOR AN AUDIT OF NASA SAFETY MANUAL REQUIREMENTS WITH THESE SAMPLE AUDIT GUIDE QUESTIONS.

MANAGEMENT:

- 1. What safety metrics are maintained at the Center?
- 2. What were the results of the last Center Safety Program Annual Assessment?
- 3. Where are the training records related to Safety maintained?
- 4. What document details the training program related to Safety at your Center?

GENERAL:

- 1. Who is the Center Safety Director?
- 2. Is there an active Safety Awards program at your Center?
- 3. What is the Center's process for documenting, reviewing, and applying Lessons Learned?
- 4. What is the Center's process for documenting and implementing both corrective and preventive actions?
- 5. Who at your Center is empowered to call for the halt of any process or operation they believe is unsafe and request analysis by a qualified individual?



NASA SAFETY AND MISSION ASSURANCE REQUIREMENTS

NPR 8715.3 NASA Safety Manual

Compliance Verification Guide



OFFICE OF SAFETY AND MISSION ASSURANCE

NASA Office of Safety and Mission Assurance 300 E Street SW Washington DC 20024-3210 Phone (202) 358-0521 www.hg.nasa.gov/office/codeg

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This brochure is intended to be used as a guide only, not as a replacement for the actual policy, and does not include all requirements. To review the NASA Safety Manual (NPD 8715.3) in its entirety, see http://www.hg.nasa.gov/office/codeg/doctree/texttree.htm.

The Objective of the Safety Manual is to introduce the NASA Safety Program.

The manual serves as the general framework to structure the more specific and detailed requirements for Headquarters, Program, and Center Directors.

NASA Values

We are dedicated to the values of Safety, the NASA Family, Excellence, and Integrity. We aspire to achieve these values in everything we do. We commit ourselves to the hard work ahead to realize these values. Once we achieve them, we will be vigilant in upholding them.

Safety

We are committed, individually and as a team, to protecting the safety and health of the public, our partners, our people and those assets that the Nation entrusts to us. Safety is the cornerstone upon which we build mission success.

Safety Manual Chapters

- 1. Basic Safety Management
- 2. Safety and Risk Management Considerations for NASA Contracts
- 3. System Safety
- 4. Safety Training and Personnel Certification
- 5. Nuclear Safety for Launching of Radioactive Materials
- 6. Operational Safety
- 7. Aviation Safety
- 8. Facility Safety
- 9. Fire Safety

MINIMUM AUDIT POINTS FOR NPR 8715.3

Core Process

▶ All employees

- Are to report any systems designs, operations, processes, or software they feel are unsafe or do not meet safety requirements.
- OQE Posting Visibility of Hierarchy, Notices of Unsafe or Unhealthful Condition (NF 1390)
- Are empowered to call for the halt of any process or operation they believe is unsafe and request analysis by a qualified individual.
- OQE Performance Evaluation Profile (PEP)
 Survey, Posting Visibility of Hierarchy
- Senior Managers incorporate safety considerations into the planning and execution of programs, projects, and operations.
 - OQE Safety Plans and Standard Operating Procedures

Center Directors and Associate Administrator for Institutions and Management

- Shall ensure that all NASA operations are performed in accordance with existing safety standards and consensus standards, or special supplemental standards when there are no known applicable standards.
- OQE –Training of Safety Standards to the Appropriate Personnel, Training Records, Certifications, Safety Plans, Operations Plans
- Shall ensure that Aviation safety programs tailored to meet the specific operational needs of the NASA Centers are established and maintained to comply with national standards and NASA directives and guidance.
- OQE Documented Aviation Safety Programs at Centers Show Adherence to National Standards
- Shall ensure that all facilities are designed, constructed, and operated in accordance with applicable codes, standards, and procedures.
- OQE Facility Operational Readiness Review
- Shall establish an Abatement Plan for unsafe or unhealthful working condition that cannot be abated within 30 days. Operations will not proceed until alternative procedures are in place to provide temporary mitigation or reduction of the risk to acceptable levels.
- OQE Hazard Abatement Plans
- Shall ensure that all accidents, mission or test failures, or other mishaps are promptly investigated for dominant root cause.
- OQE Mishap Reports
- Shall ensure continuous improvement is initiated through corrective actions and lessons learned.
- OQE Lessons Learned Information System and Corrective Action Plans
- Shall ensure events resulting in significant release of pollutants to the environment are coordinated

- with the cognizant NASA environmental management organization for appropriate response/reporting to regulatory authorities.
- OQE National Environmental Policy Act Documentation

Process Check

- Managers/Supervisors will assure safety training is included as part of formal performance evaluation process and will further encourage safe performance through safety incentive awards programs.
 - OQE Center Training Plans, Performance Evaluations, Safety Award Certificates

Center Directors and Associate Administrator for Institutions and Management

- Include, for performance evaluation purposes, documentation of compliance with incorporating safety considerations into the planning and execution of programs, projects, and operations.
- OQE Performance Evaluations Related to Safety
- Will incorporate measurable performance criteria in line manager's performance plans and evaluate and document results in their performance evaluations.
- OQE Performance Evaluations Related to Safety
- Shall ensure that contractor operations and designs are evaluated for consistency and compliance with safety provisions of contract.
- OQE Contractor and NASA Audits of Contractor Facilities
- Shall ensure that an ad hoc interagency review and approval process is implemented for the use of radioactive materials in spacecraft.
- OQE Reviews and Approval of the Use of Radioactive Materials
- Center Safety Staff, Independent Outside Source shall perform an annual assessment of the Center Safety Program that:
 - Evaluates the effectiveness of safety program management.
 - Evaluates the implementation of Public Law 91-596, as amended by; E.O. 12196, as amended by; OSHA Regulations at 29 CFR Part 1910, and other pertinent federally mandated requirements.
 - Identifies hazards and deficiencies in the safety program
 - Evaluates the effectiveness of the abatement process.
 - e. Determines the adequacy of safety standards and procedures.
 - f. Observes compliance with safety practices.
 - g. Verifies corrective actions from previous assessments.
 - OQE Documented Assessment of the Center Safety Program and Annual OSHA Report